



Other Factors

VISUAL

REFERENCE

IMAGES

O.F.-1.0 ANIMAL FILTH



Portion for Analysis: 1,000 grams of original sample

Bird droppings and rodent pellets.

O.F.-2.2 WILD BROME GRASS SEEDS



Portion for Analysis: 1,000 grams dockage free

Seeds -- distinguishable by harsh awns of Brome grasses.

O.F.-3.0 CASTOR BEANS



Portion for Analysis: Sample as a whole

Multi-colored bean-like seed of the castor oil plant.

This seed is highly toxic to animals and humans and is not safe to feed until processed.

O.F.-4.0 CHESS



Portion for Analysis: 50 grams (Also see inspection manual)

A weed seed from any of several varieties of brome grass and generally found in wheat fields.

O.F.-5.0 COB JOINTS



Portion for Analysis: 50 grams (Dockage-free wheat)

Cob or pieces of cobs from the wheat rachis--that part of the plant where the kernel attaches to the head.

O.F.-6.0 COCKLEBUR, YELLOW STAR THISTLE, STAR/SAND BUR



Portion for Analysis: Sample as a whole (Also see Inspection Handbook)

Common bur or thorn-like seeds appearing in grain.

O.F.-8.0 CROTALARIA SEEDS



Portion for Analysis: 1,000 grams cut from the original sample

Seeds of various colors that are generally kidney or boxing glove shaped.

NOTE: Do not confuse with non-toxic velvet leaf seeds.

O.F.-8.1 VELVET LEAF SEEDS



Portion for Analysis: None specified

Non-toxic weed seeds of similar size and shape to crotalaria but with a dull rough appearance.

NOTE: Do not confuse with toxic crotalaria seeds

O.F.-9.0 CULTIVATED BUCKWHEAT



Portion for Analysis: Varies with type of grain

A triangular-shaped kernel of cultivated buckwheat.

NOTE: Similar in shape but much larger in size than wild buckwheat

O.F.-10.0 EINKORN



Portion for Analysis: Varies with types of grain

A pale reddish, slender kernel of a species of wheat--often called “one-grain wheat”--characterized by a taper on the brush end of the kernel.

O.F.-11.0 EMMER



Portion for Analysis: Varies with type of grain

A reddish, slender kernel of a species of wheat--usually remaining in the glume after threshing--characterized by a small germ and a heavy brush.

O.F.-12.0 ERGOT



Portion for Analysis: Varies with type of grain

A fungus disease causing the grains to be replaced by dark-colored growths.

NOTE: Consult the Grain Inspection Manual for its grading function in each grain.

O.F.-13.0 GREEN GARLIC BULBS (WHOLE)



Portion for Analysis: Varies with type of grain

Green garlic bulblets which have all the husks intact and which show no cracks or breaks.

O.F.-13.1 DRY GARLIC BULBS (1/3RD)



Portion for Analysis: Varies with type of grain

Dry or partially dry garlic bulblets which have lost all or part of the husks and bulblets with cracked or broken husks.

O.F.-14.0 GUAR



Portion for Analysis: Varies with type or grain

A generally round but wrinkled or dented and relatively small bean of a legume plant and with coloration ranging from dull white to black.

O.F.-15.0 HULLESS BARLEY



Portion for Analysis: Varies with type of grain

A kernel or pieces of kernels of barley--usually spring-grown Six-rowed Barley with a short and plump appearance and to which the palea and lemma (Hulls) do not adhere or adhere loosely.

O.F.-18.0 POLISH WHEAT



Portion for Analysis: Varies with type of grain

A kernel or piece of a kernel of wheat which is very long, narrow, and flinty.

NOTE: Do not confuse with Durum Wheat.

O.F.-19.0 POULARD WHEAT



Portion for Analysis: Varies with type of grain

A kernel or piece of a kernel of wheat which is short, humped, and egg shaped.

NOTE: Do not confuse with White Wheat.

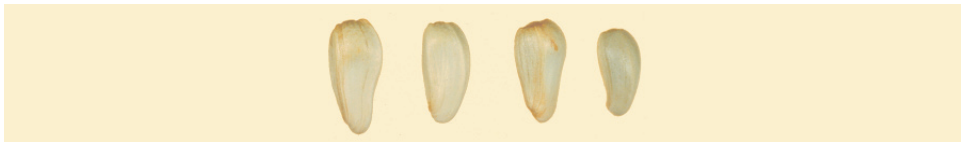
O.F.-20.0 RICE TYPES



Portion for Analysis: Varies with type of grain

From left to right, kernels of Rough Rice (Paddy Rice), Red Rice, Brown Rice for Processing, and Long-, Medium-, and Short-grain Milled Rice.

O.F.-21.0 SAFFLOWER SEED



Portion for Analysis: Varies with type of grain

A mostly white but occasionally gray colored seed from the Safflower plant and used primarily for its oil content.

O.F.-22.0 SMUT BALLS



Portion for Analysis: Not less than 250 grams cut from dockage-free “work” sample

A black ball-shaped spore containing body caused by plant disease. These balls frequently break into smaller pieces or into a fine black powder.

O.F.-24.0 SPELT



Portion for Analysis: Varies with grain

A red, elongated kernel of a species of wheat that has parallel sides and a sharp-pointed germ. The kernel usually remains in the glumes after threshing.

O.F.-25.0 SUNFLOWER SEED



Portion for Analysis: Varies with type of grain.

A black, thin-hulled, fairly large sized seed of the oil-producing variety of sunflower plant or a black and white striped, thick-hulled, seed of the non-oil variety of sunflowers.

O.F-26.0 TRITICALE



Portion for Analysis: Varies with type of grain

Kernels of pieces of kernels of triticale -- a hybrid cross between wheat and rye -- with a very pronounced shriveled appearance.

O.F.-27.0 WILD BUCKWHEAT AND SIMILAR SEEDS



Portion for Analysis: 50 grams (Also see Inspection Handbook)

Row A: Triangular-shaped hulled and unhulled wild buckwheat.

Row B: Seeds of similar size and/or shape, such as yellow foxtail and millet.

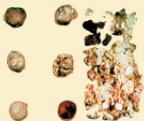
O.F.-28.0 WILD OATS



Portion for Analysis: Varies with type of grain

Wild oats of various colors are usually slender kernels with twisted awns (sucker mouths) and basal hairs or bristles on the germ end of the kernel.

O.F.-31.0 SUSPECTED FERTILIZER(FSUB)



Portion for Analysis: Varies with type of grain

Grain containing four or more pieces of material suspected of being commercial fertilizer (FSUB), shall be graded Sample Grade or distinctly low quality as the case may be.

All of the following situations may occur and FSUB will apply:

1. Four or more whole or broken pieces equal to or greater in size than shown
2. Pieces of suspected fertilizer smaller in size than that shown, but when combined are equal to or greater than shown.
3. Pulverized pellets of suspected fertilizer which when accumulated are equal to or greater than the amount of the four pulverized pellets shown.

NOTE: Commercial fertilizer varies from fine granular material to larger pellets than shown and therefore, are not limited to the types shown.

O.F.-32.0 SCLEROTIA



Portion for Analysis: Approximately 1,000 grams

The fungus *Sclerotinia sclerotiorum* causes a stem disease (stem rot) in soybeans which results in large black growths (Sclerotia) of the stem and pods. The growths may resemble ergot (see slide OF-12.0) in shape, possess the same type of dark striated exterior and has a CREAMY white inner tissue. The inner tissue of ergot has a light tinge of purple.

O.F.-34.0 COTTON SEED



Portion for Analysis: As requested by applicant

A seed from the cotton plant. The seed is approximately $\frac{3}{8}$ inch long and $\frac{3}{16}$ inch wide. It is covered by a soft fibrous white substance. Sometimes the seed will appear blackish and fiberless (no cotton adhering to the seed).

Illustration from left to right:

Left: Cotton adhering to the seed.

Right: Fiberless seed.

O.F.-35.0 MALTED BARLEY



Portion for Analysis: Approximately 25 grams

Kernels which have undergone the malting process and show any degree of sprout.

NOTE: Barley containing more than 50% of Malted kernels is considered Not Standardized Grain.

This is an exhibit of Malted barley and is not used as an interpretation of sprout.